



December 19, 2003

**Via US Mail and E-mail**

Michael O. Leavitt, Administrator  
U.S. Environmental Protection Agency  
P.O. Box 1473  
Merrifield, VA 22116

**Re: Rubber and Plastic Additives (RAPA) Panel  
HPV Chemical Challenge Program Submission  
Benzothiazole- and Morpholine-Based Thiazole (BMBT) Category  
Revision in Part of the Benzothiazole-Based Thiazole Category  
Category Justification and Testing Rationale**

Dear Administrator Leavitt:

The RAPA Panel of the American Chemistry Council is pleased to submit a *Category Justification and Testing Rationale* and supporting robust summary documents for the *Benzothiazole- and Morpholine-Based Thiazole* (BMBT) Category as partial revision of the documentation for some of the chemicals originally included in the *Benzothiazole-based Thiazoles* category. As more fully explained in the attached documents, the revised category definition covers two of the 37 chemicals RAPA is voluntarily sponsoring in the HPV Chemical Challenge Program (Program). The RAPA Panel includes the following member companies: Alco Chemicals; Bayer Polymers LLC; Ciba Specialty Chemicals Corporation; Crompton Corporation; Eliokem, Inc.; Flexsys America L.P.; The Goodyear Tire & Rubber Company; The Lubrizol Corporation; Noveon, Inc.; and, R.T. Vanderbilt Company, Inc.

In this submission, please find the *Category Justification and Testing Rationale* for the BMBT category. Two of the seven chemicals in this category are “sponsored” in the Program, as listed in the following table:

<b>RAPA Panel</b>	
<b>Benzothiazole– and Morpholine-Based Thiozole Category</b>	
<b>Chemicals Sponsored in the US HPV Chemical Challenge Program</b>	
<b>CAS Number</b>	<b>Compound Name</b>
95-32-9	Benzothiazole, 2-(4-morpholinyl)dithio) [Morfax]
103-34-4	4,4'-Dithiodimorpholine [DTDM]

One of these sponsored chemicals, Morfax (CAS No. 95-32-9) was formerly included in the *Benzothiazole-Based Thiazole* Category. The second, DTDM (CAS No. 103-34-4) was formerly sponsored in the HPV Program as a stand-alone chemical, and has not been previously considered in

documents submitted to the Program by the RAPA Panel. These changes are made as a result of comments received on previous RAPA submissions.

Data for five additional chemicals in the category, listed in the table below, are used to “support” the conclusions reached for the category.

<b>RAPA Panel Benzothiazole- and Morpholine-Based Thiozole Category Additional Chemicals in the Category</b>	
<b>CAS Number</b>	<b>Compound Name</b>
95-16-9	Benzothiozole
102-77-2	N-oxydiethylenebenzothiazole-2-sulfenamide [MBS]
110-91-8	Morpholine
120-78-5	Benzothiazole disulfide [MBTS]
149-30-4	2-Mercaptobenzothiazole [MBT]

Documents were previously submitted in support of the *Benzothiazole-Based Thiazole* category (dated November 30, 2001). Comments received from EPA dated September 6, 2002 questioned whether the data supported extrapolation across the category. In consideration of these comments, revised test plans and robust summaries for the revised *Benzothiazole-based Thiazoles* category were submitted on July 17, 2003, to include three of the four chemicals included in the original *Benzothiazole-Based Thiazoles* category. The fourth chemical is included here, in separate documents describing the BMBT category.

In addition to the revised *Category Justification and Testing Rationale*, please also find attached revised robust summaries for the two sponsored chemicals and the five supporting chemicals in the BMBT category.

This submission is also being sent electronically to the following e-mail addresses:

[Oppt.ncic@epa.gov](mailto:Oppt.ncic@epa.gov)  
[Chem.rtk@epa.gov](mailto:Chem.rtk@epa.gov)

If you require additional information, please contact the RAPA Panel’s technical contact, Dr. Anne P. LeHuray at (703) 741-5630 or [anne\\_lehuray@americanchemistry.com](mailto:anne_lehuray@americanchemistry.com).

Sincerely yours,

Courtney M. Price  
Vice President, CHEMSTAR

Attachments